

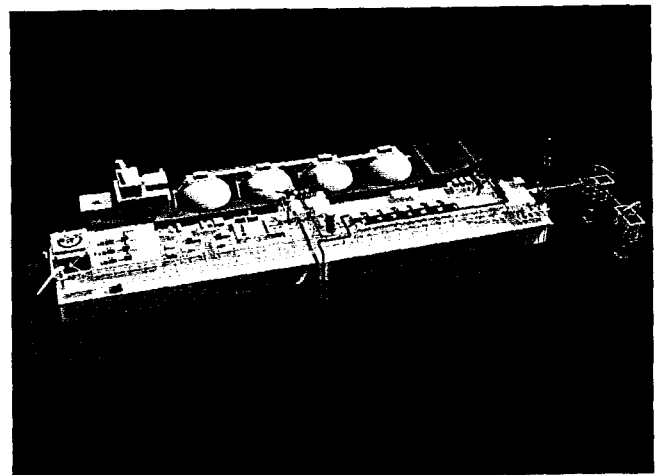
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## **Appendix B**

### **Applicable Laws and Executive Orders**

USCG-2004-16860-64

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**Table of Applicable Laws and Executive Orders <sup>1</sup>**

Title, Citation	Summary
Archaeological and Historical Preservation Act, 16 U.S.C. 469	Protects and preserves historical and archaeological data. Requires Federal agencies to identify and recover data from archaeological sites threatened by a proposed action(s).
Clean Air Act, 42 U.S.C. 7401-7671q, as amended	Establishes Federal standards for air pollutants. Prevents significant deterioration in areas of the country where air quality fails to meet Federal standards.
Clean Water Act, 33 U.S.C. 1251-1387 (also known as the Federal Water Pollution Control Act)	Comprehensively restores and maintains the chemical, physical, and biological integrity of the Nation's waters. Implemented and enforced by the U.S. Environmental Protection Agency (USEPA).
Coastal Barrier Resources Act, 16 U.S.C. 3501-3510	Discourages coastal barrier island degradation by prohibiting direct or indirect Federal financial funds (including flood insurance) for development, except for emergency life-saving activities.
Coastal Zone Management Act of 1972, 16 U.S.C. 1451-1464	Establishes a policy to preserve, protect, develop, and where possible, restore and enhance the resources of the Nation's coastal zone. Encourages and assists states in developing and implementing coastal zone management programs.
Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. 9601-9675 (also known as "Superfund")	Provides for liability, compensation, cleanup, and emergency response for hazardous substances released into the environment and cleanup of inactive hazardous substances disposal sites. Establishes a fund financed by hazardous waste generators to support cleanup and response actions.
Deepwater Port Act of 1974, 33 U.S.C. 1501-1524	Assigns responsibility to the Secretary of Transportation to license the construction and operation of all oil and natural gas deepwater ports located beyond the U.S. territorial sea and off the U.S. coast.
Endangered Species Act of 1973, 16 U.S.C. 1531-1543, as amended	Protects threatened, endangered, and candidate species of fish, wildlife, and plants and their designated critical habitats. Prohibits Federal action that jeopardizes the continued existence of endangered or threatened species. Requires consultation with U.S. Fish and Wildlife Service (USFWS) and National Oceanic and Atmospheric Administration (NOAA) Fisheries and a biological assessment when such species are present in an area affected by government activities.

**Table of Applicable Laws and Executive Orders (continued)**

Title, Citation	Summary
Fish and Wildlife Coordination Act, 16 U.S.C. 661-667e, as amended	Authorizes the Secretaries of Interior and Commerce to provide assistance to and cooperate with Federal and State agencies to protect, rear, stock, and increase the supply of game and fur-bearing animals, as well as to study the effects of domestic sewage, trade wastes, and other polluting substances on wildlife. The 1946 amendments require consultation with the USFWS and the state fish and wildlife agencies involving any waterbodies that are proposed or authorized, permitted or licensed to be impounded, diverted or otherwise controlled or modified by any agency under a Federal permit or license.
Magnuson-Stevens Fishery Conservation and Management Act, 16 U.S.C. 1801-1883, as amended	Establishes regional fisheries councils that set fishing quotas and restrictions in U.S. waters. Requires Federal agencies to consult with NOAA Fisheries on all actions (authorized, funded, or undertaken) that might adversely affect essential fish habitat.
Marine Mammal Protection Act of 1972, 16 U.S.C. 1361-1389, 1401-1407, 1538, 4107	Establishes a moratorium on the taking and importation of marine mammals. Prohibits harassing, hunting, capturing, collecting, or killing of marine mammals or attempting such actions. Requires permits for taking marine mammals. Requires consultations with USFWS and NOAA Fisheries if impacts on marine mammals are possible.
Marine Protection, Research, and Sanctuaries Act of 1972, 33 U.S.C. 1401-1445	Regulates dumping of materials into ocean waters. Provides a permitting process to control ocean dumping of dredged materials. Establishes the marine sanctuaries program.
Maritime Transportation Security Act of 2002, Pub. L. 107-295	Extends the Deepwater Port Act application to include facilities and operations related to natural gas.
Migratory Bird Treaty Act, 16 U.S.C. 703-712	Implements various treaties for protecting migratory birds; the taking, killing, or possession of migratory birds is unlawful.
National Environmental Policy Act of 1969, 42 U.S.C. 4321-4370e, as amended	Requires Federal agencies to use a systematic approach when assessing environmental impacts of government activities. Proposes an interdisciplinary approach in a decision-making process designed to identify unacceptable or unnecessary impacts to the environment.
National Historic Preservation Act, 16 U.S.C. 470-470x-6	Requires Federal agencies to consider the effect of any federally assisted undertaking or licensing on any district, site, building, structure, or object eligible for inclusion, or listed in the National Register of Historic Places (NRHP). Provides for the nomination, identification (through NRHP listing), and protection of significant historical and cultural properties.

**Table of Applicable Laws and Executive Orders (continued)**

Title, Citation	Summary
National Marine Sanctuaries Act, 16 U.S.C. 1431 <i>et seq.</i>	Authorizes the Secretary of Commerce to designate national marine sanctuaries based on statutory criteria and stipulated factors to be considered by the Secretary as a basis for designation. Stipulates consultation requirements with various Federal agencies, Congressional committees, state agencies and regional fishery councils.
Natural Gas Act of 1938, 15 U.S.C. 717	Designates the Federal Energy Regulatory Commission—an independent agency within the Department of Energy—to regulate the transmission and sale of natural gas for resale in interstate commerce.
Natural Gas Pipelines and Safety Act of 1968 and Hazardous Liquid Pipeline Safety Act of 1979, as amended, 49 U.S.C. 601	The Natural Gas Pipelines and Safety Act of 1968 authorizes the Department of Transportation to regulate pipeline transportation of natural (flammable, toxic, or corrosive) gas and other gases as well as the transportation and storage of liquefied natural gas (LNG). The Hazardous Liquid Pipeline Safety Act of 1979 authorizes the Department of Transportation to regulate pipeline transportation of hazardous liquids (crude oil, petroleum products, anhydrous ammonia, and carbon dioxide). Both of these Acts have been recodified as 49 U.S.C. Chapter 601.
Noise Control Act of 1972, 42 U.S.C. 4901-4918	Establishes a national policy to promote an environment free from noise that jeopardizes health and welfare. Authorizes the establishment of Federal noise emissions standards and provides relevant information to the public.
Nonindigenous Aquatic Nuisance Prevention Control Act of 1990, 16 U.S.C. 4701-4751	Establishes aquatic nuisance species.
Northwest Atlantic Fisheries Convention Act of 1995, 16 U.S.C. 5601-5610	Implements provisions of international conventions and establishes regulatory framework.
Occupational Safety and Health Act of 1970, 29 U.S.C. 651-678	Establishes standards to protect workers, including standards on industrial safety, noise, and health standards.
Outer Continental Shelf Lands Act of 1953, 43 U.S.C. 1331-1356, as amended	Defines the Outer Continental Shelf as all submerged lands lying seaward of State coastal waters that are three miles offshore. Delegates leasing authority to the Secretary of the Interior to promulgate regulations in an effort to reduce waste and conserve natural resources.

**Table of Applicable Laws and Executive Orders (continued)**

Title, Citation	Summary
Port and Waterways Safety Act, 33 U.S.C. 1221-1232	Sets boat operating and towing safety requirements and established enforcement provisions. Authorizes the U.S. Coast Guard (USCG) to establish vessel traffic service/separation schemes for ports, harbors, and other waters subject to congested vessel traffic.
Resource Conservation and Recovery Act, 42 U.S.C. 6901-6992k	Establishes requirements for safely managing and disposing of solid and hazardous waste and underground storage tanks.
Executive Order (EO) 12372, <i>Intergovernmental Review of Federal Programs</i> , July 14, 1982, 47 FR 30959 (6/16/82), as supplemented	Requires Federal agencies to consult with state and local governments when proposed Federal financial assistance or direct Federal development impacts interstate metropolitan urban centers or other interstate areas.
EO 12898, <i>Environmental Justice</i> , February 11, 1994, 59 FR 7629 (2/16/94), as amended	Requires certain Federal agencies, to the greatest extent practicable permitted by law, to make environmental justice part of their missions by identifying and addressing disproportionately high and adverse health or environmental effects on minority and low-income populations.
EO 13089, <i>Coral Reef Protection</i> , June 11 1998, 64 FR 232 (12/3/99)	Mandates that all Federal agencies whose actions may affect U.S. coral reef ecosystems (1) identify their actions that may affect U.S. coral reef ecosystems; (2) use their programs and authorities to protect and enhance the conditions of such ecosystems; and (3) to the extent permitted by law, ensure that any actions they authorize, fund, or carry out will not degrade the conditions of such ecosystems. Federal agencies shall, subject to the availability of appropriations, provide for the implementation of measures needed to research, monitor, manage, and restore affected ecosystems, including measures reducing impacts from pollution, sedimentation, and fishing.
EO 13148, <i>Greening the Government Through Leadership in Environmental Management</i> , April 21, 2000, 65 FR 24595 (4/26/00)	Designates the head of each Federal agency to ensure that all necessary actions are taken to integrate environmental accountability into agency day-to-day decision making and long-term planning processes, across all agency missions, activities, and functions. Establishes goals for environmental management, environmental compliance, right-to-know (informing the public and their workers of possible sources of pollution resulting from facility operations) and pollution prevention, and similar matters.
EO 13175, <i>Consultation and Coordination with Indian Tribal Governments</i> , November 6, 2000, 65 FR 67249 (11/09/00)	Requires Federal agencies to establish an accountable process that ensures meaningful and timely input from tribal officials in developing policies that have tribal implications.

**Table of Applicable Laws and Executive Orders (continued)**

Title, Citation	Summary
EO 13186, <i>Responsibilities of Federal Agencies to Protect Migratory Birds</i> , January 10, 2001, 66 FR 3853 (1/17/01)	Requires each agency to ensure that environmental analyses of Federal actions (required by the National Environmental Policy Act or other established environmental review processes) evaluate the effects of actions and agency plans on migratory birds, emphasizing species of concern. Agencies must support the conservation intent of migratory bird conventions by integrating bird conservation principles, measures, and practices into agency activities, and by avoiding or minimizing, to the extent practicable, adverse impacts on migratory bird resources when conducting agency actions.
EO 11593, <i>Protection and Enhancement of the Cultural Environment</i> , May 13, 1971, 36 FR 8921 (5/15/71)	Requires all Federal agencies to locate, identify, and record all cultural resources, including significant archaeological, historical, or architectural sites.

<sup>1</sup> This table only reflects those laws and EOs that may reasonably be expected to apply to the Proposed Action and alternatives.

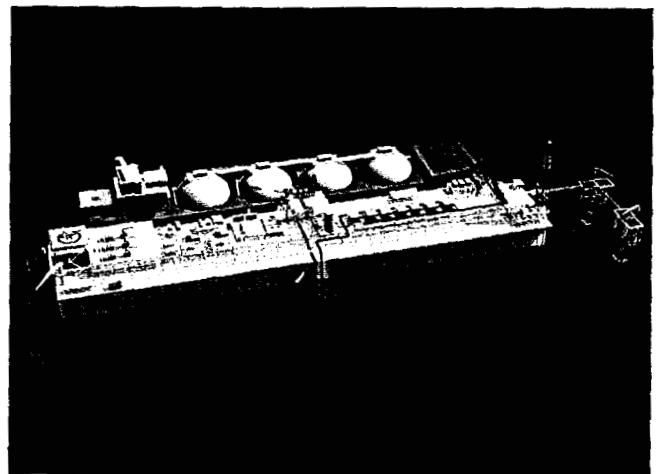
Other laws and Executive Orders relevant to consideration of licensing of deepwater ports include, but are not limited to:

- Abandoned Shipwreck Act, 43 U.S.C. 2102, et seq.
- American Indian Religious Freedom Act, 42 U.S.C. 1996, et seq.
- Antiquities Act, 16 U.S.C. 433, et seq.; Archeological Resources Protection Act, 16 U.S.C. 470 aa-ll, et seq.
- Architectural Barriers Act, 42 U.S.C. 4151, et seq.
- Community Environmental Response Facilitation Act, 42 U.S.C. 9620, et seq.
- Department of Transportation Act, P.L. 89-670, 49 U.S.C. 303, Section 4(f), et seq.
- Emergency Planning and Community Right-to-Know Act, 42 U.S.C. 11001-11050, et seq.
- Environmental Quality Improvement Act, P.L. 98-581, 42 U.S.C. 4371, et seq.
- Farmlands Protection Policy Act, P.L. 97-98, 7 U.S.C. 4201, et seq.
- Federal Insecticide, Fungicide, and Rodenticide Act, P.L. 86-139, 7 U.S.C. 135, et seq.
- Federal Records Act, 44 U.S.C. 2101-3324, et seq.
- Fish and Wildlife Act of 1956, P.L. 85-888, 16 U.S.C. 742, et seq.
- Flood Disaster Protection Act, 42 U.S.C. 4001, et seq.
- Native American Graves Protection and Repatriation Act, 25 U.S.C. 3001, et seq.
- Pollution Prevention Act of 1990, 42 U.S.C. 13101-13109, et seq.
- Safe Drinking Water Act, P.L. 93-523, 42, U.S.C. 201, et seq.

- Toxic Substances Control Act, 7 U.S.C. 136, et seq.
- Wild and Scenic Rivers Act, P.L. 90-542, 16 U.S.C. 1271, et seq.
- EO 12902, dated March 8, 1994, *Energy Efficiency and Water Conservation at Federal Facilities*, 59 FR 11463
- EO 12114, dated January 9, 1979, *Environmental Effects Abroad of Major Federal Actions*, 44 FR 1957
- EO 12088, dated October 13, 1978, *Federal Compliance with Pollution Control Standards*, 43 FR 47707, as amended by EO 12580, dated January 23, 1987, and revoked (in part) by EO 13148, dated April 21, 2000
- EO 13132, dated August 4, 1999, *Federalism*, 64 FR 43255
- EO 11988, dated May 24, 1977, *Floodplain Management and Protection*, 42 FR 26951, as amended by EO 12148, dated July 20, 1979, 44 FR 43239
- EO 13007, dated May 24, 1996, *Historic Sites Act*, 16 U.S.C. 46, et seq.; Indian Sacred Sites, 61 FR 26771
- EO 12372, dated July 14, 1982, *Intergovernmental Review of Federal Programs*, 47 FR 30959, as amended by EO 12416, April 8, 1983, 48 FR 15587; supplemented by EO 13132, August 4, 1999, 64 FR 43255
- EO 13112, dated February 3, 1999, *Invasive Species*, 64 FR 6183, as amended by EO 13286, February 28, 2003, 68 FR 10619
- EO 13158, dated May 26, 2000, *Marine Protected Areas*, 65 FR 2490
- EO 11514, dated March 5, 1970, *Protection and Enhancement of Environmental Quality*, 35 FR 4247, as amended by EO 11541, July 1, 1970, 35 FR 10737 and EO 11991, May 24, 1977, 42 FR 26967
- EO 13045, dated April 21, 1997, *Protection of Children from Environmental Health and Safety Risks*, 62 FR 19885, as amended by EO 13229, October 9, 2001, 66 FR 52013 and EO 13296, April 18, 2003, 68 FR 19931
- EO 11990, dated May 24, 1977, *Protection of Wetlands*, 42 FR 26961, as amended by EO 12608, September 9, 1987, 52 FR 34617
- EO 12962, dated June 7, 1995, *Recreational Fisheries*, 60 FR 307695
- EO 13123, *Greening the Government Through Efficient Energy Management*, dated June 3, 1999, 64 FR 30851

***Appendix C***  
***Endangered and Threatened Species Consultation***

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U.S. Department of  
Homeland Security

United States  
Coast Guard



Commandant  
United States Coast Guard

2100 Second Street, S.W.  
Washington, DC 20593-0001  
Staff Symbol: G-MSO-5  
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Fax: (202) 267-4570

16613

Mr. David Bernhart  
Assistant Regional Administrator for Protected Resources  
U.S. Department of Commerce  
National Oceanic and Atmospheric Administration F/SER  
9721 Executive Center Drive North  
St. Petersburg, FL 33072

MAY 6 2004

**Subj: Gulf Landing LLC Deepwater Port Environmental Impact Statement**

Dear Mr. Bernhart:

On November 3, 2003 Gulf Landing, LLC, a wholly owned subsidiary of Shell U.S. Gas and Power, LLC, submitted an application seeking approval to construct, own, and operate a deepwater port (DWP). The proposed port, known as Gulf Landing, would be located approximately 38 miles from shore in the Gulf of Mexico, off of Cameron Parish, Louisiana in West Cameron lease block number 213.

The U.S. Coast Guard and Maritime Administration (MARAD) are preparing an Environmental Impact Statement (EIS) as part of the processing of the Gulf Landing DWP license application. The EIS will be prepared in accordance with the National Environmental Policy Act of 1969 (NEPA), as amended (42 [U.S.C.] 4321, *et seq.*), and pursuant to the requirements of the Deepwater Port Act (33 [U.S.C.] 1501, *et seq.*).

The proposed LNG terminal would consist of two concrete gravity base structures (GBSs), located in approximately 54 feet of water depth and adjacent to an existing shipping fairway serving the Calcasieu River and area ports. The location of the proposed port is presented in enclosure (1). The terminal would be capable of storing up to 64 million cubic feet of LNG and vaporizing up to 1.2 billion cubic feet per day. The port would include five take-away pipelines of varying sizes with a total length of 65.7 miles. The pipelines would interconnect with existing offshore natural gas pipelines located in the Gulf of Mexico. From these pipelines, the natural gas would enter the onshore national pipeline grid for delivery to any consumption market east of the Rocky Mountains. The Gulf Landing LLC application is available for viewing and downloading from the DOT Docket Management System Web Page <<http://dms.dot.gov>>, Docket Number "USCG-2004-16860." An electronic copy of the Gulf Landing DWP license application has also been enclosed for your convenience.

**Subj: Gulf Landing LLC Deepwater Port Environmental Impact Statement**

In accordance with Section 7 of the Endangered Species Act, as amended, we seek to informally consult with NOAA Fisheries regarding the presence of marine mammals and threatened and endangered species that may be affected by the Proposed Action. We will also consult with the U.S. Fish and Wildlife Service regarding the presence of threatened and endangered species and migratory bird species under their jurisdiction and NOAA Fisheries Habitat Conservation Division regarding essential fish habitat.

We are currently preparing an EIS and intend to have the EIS stand as our Biological Assessment (BA) for this proposal. In order to fully assess the potential impacts associated with the Proposed Action on threatened and endangered species, we are requesting a list of species of concern that occur within the region of influence (ROI). Additionally, please provide a list of any additional concerns that NOAA Fisheries may have regarding the potential impacts of the Proposed Action.

Finally, engineering-environmental Management, Inc. (e<sup>2</sup>M) is providing the U.S. Coast Guard with technical assistance in the preparation of the EIS Assessment. The U.S. Coast Guard has designated e<sup>2</sup>M as the non-Federal representative for consultation purposes for this action.

Thank you for your assistance and we look forward to working with your office on this project. If you have questions about the proposed Gulf Landing deepwater port or about the EIS, you may contact LT Derek Dostie of my staff at [ddostie@comdt.uscg.mil](mailto:ddostie@comdt.uscg.mil) or (202) 267-0662.

Sincerely,



Mark A. Prescott  
U.S. Coast Guard  
Chief, Deepwater Ports Standards Division  
By direction

Encl: (1) Graphic Depicting the Proposed Location of the Gulf Landing DWP  
(2) Electronic Copy of the Gulf Landing DWP Application

Copy: Mr. Eric Hawk (Section 7 Coordinator, SERO, Protected Resources Division)  
Mr. Kyle Baker (Fishery Biologist, NOAA Fisheries, SERO, Protected Resources Division)  
Mr. Ken Hollingshead (Fishery Biologist, NOAA Fisheries, Headquarters, Office of Protected Resources, Marine Mammals Division)  
Mr. Keith Lesnick (MARAD)



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U.S. Department of  
Homeland Security

United States  
Coast Guard



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United States Coast Guard

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16613

Mr. Russell C. Watson  
U.S. Fish and Wildlife Service  
Field Supervisor  
646 Cajundome Boulevard  
Suite 400  
Lafayette, LA 70506

MAY 6 2004

**Subj: Gulf Landing LLC Deepwater Port Environmental Impact Statement**

Dear Mr. Watson:

On November 3, 2003 Gulf Landing, LLC, a wholly owned subsidiary of Shell U.S. Gas and Power, LLC, submitted an application seeking approval to construct, own, and operate a deepwater port (DWP). The proposed port, known as Gulf Landing, would be located approximately 38 miles from shore in the Gulf of Mexico, off of Cameron Parish, Louisiana in West Cameron lease block number 213.

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**Subj: Gulf Landing LLC Deepwater Port Environmental Impact Statement**

In accordance with Section 7 of the Endangered Species Act, as amended, we seek to informally consult with USFWS regarding the presence of threatened and endangered species and migratory bird species under your jurisdiction that may be affected by the Proposed Action. We will also consult with the NOAA Fisheries Habitat Conservation Division regarding essential fish habitat and NOAA Protected Resources Division regarding the presence of marine mammals and threatened and endangered species.

We are currently preparing an EIS and intend to have the EIS stand as our Biological Assessment (BA) for this proposal. In order to fully assess the potential impacts associated with the Proposed Action on threatened and endangered species, we are requesting a list of species of concern that occur within the region of influence (ROI). Additionally, please provide a list of any additional concerns that USFWS may have regarding the potential impacts of the Proposed Action.

Finally, engineering-environmental Management, Inc. (e<sup>2</sup>M) is providing the U.S. Coast Guard with technical assistance in the preparation of the EIS Assessment. The U.S. Coast Guard has designated e<sup>2</sup>M as the non-Federal representative for consultation purposes for this action.

Thank you for your assistance and we look forward to working with your office on this project. If you have questions about the proposed Gulf Landing deepwater port or about the EIS, you may contact LT Derek Dostie of my staff at [ddostie@comdt.uscg.mil](mailto:ddostie@comdt.uscg.mil) or (202) 267-0662.

Sincerely,



Mark A. Prescott  
U.S. Coast Guard  
Chief, Deepwater Ports Standards Division  
By direction

Encl: (1) Graphic Depicting the Proposed Location of the Gulf Landing DWP  
(2) Electronic Copy of the Gulf Landing DWP Application

Copy: Bridget Firmin (Biologist, USFWS, Lafayette Field Office)  
Mr. Keith Lesnick (MARAD)

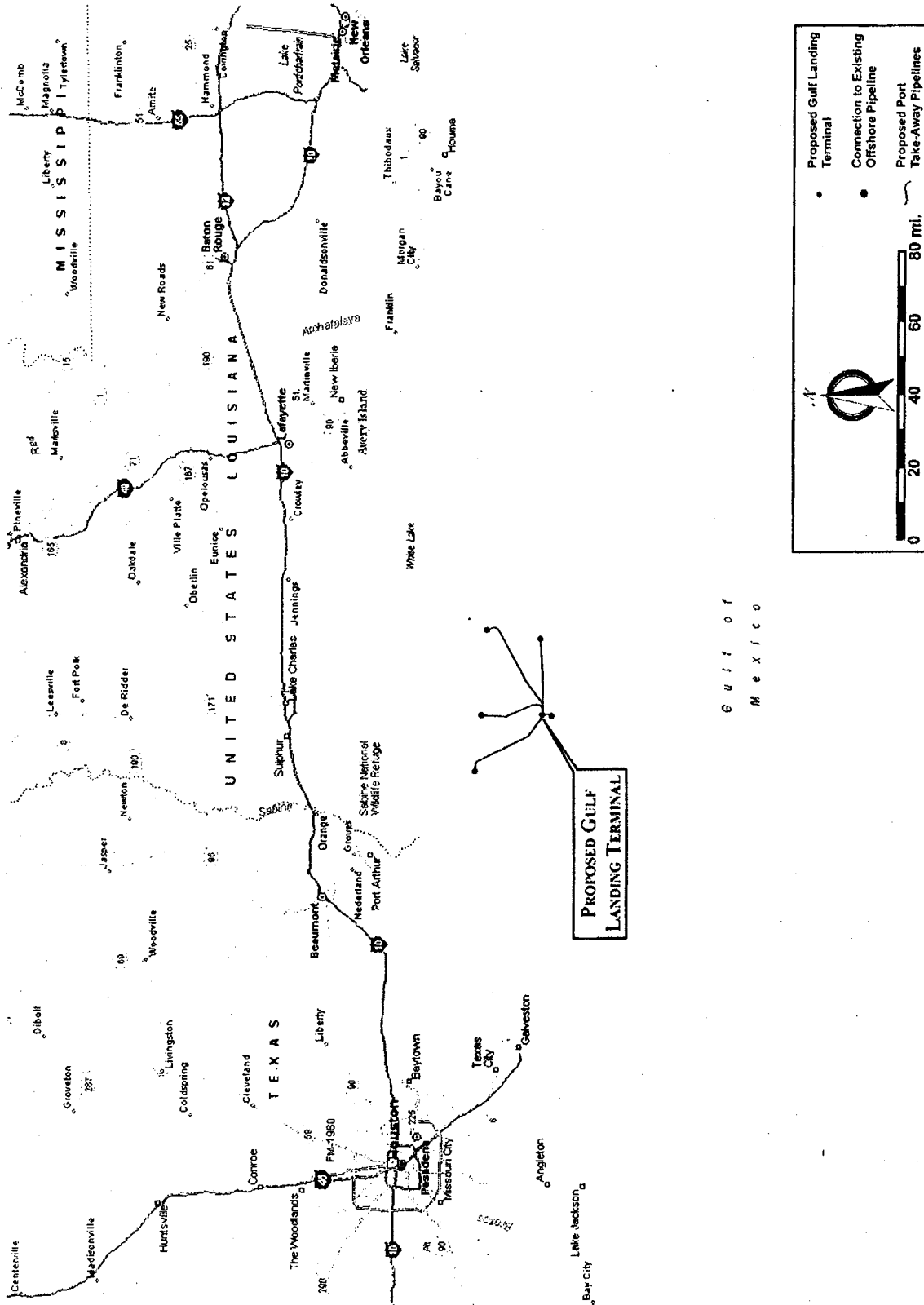


Figure 1. Location of Proposed Gulf Landing Terminal and Surrounding Area

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# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

1875 Century Boulevard  
Atlanta, Georgia 30345

In Reply Refer To:  
FWS/R4/ES

APR 19 2004

04 APR 20 PM 2:33

DEPT OF TRANSPORTATION  
MARITIME ADMINISTRATION

Docket Management Facility  
Attn: Lieutenant Derek Dostie, U.S. Coast Guard  
Department of Transportation  
400 Seventh Street, SW  
Washington, DC 20590-0001

USCG-2004-16877-314

Subject: Notice of Intent (NOI) to Prepare an Environmental Impact Statement (EIS) for the Gulf Landing, L.L.C., Liquefied Natural Gas (LNG) Deepwater Licensing Applications

Dear Lieutenant Dostie:

The Fish and Wildlife Service has reviewed the subject Notice of Intent, and offers the following comments to the U.S. Coast Guard and Maritime Administration (USCG/MARAD), in accordance with provisions of the National Environmental Policy Act (NEPA) of 1969 (83 Stat. 852; 42 U.S.C. 4321 et seq.), the Endangered Species Act (ESA) of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.), the Migratory Bird Treaty Act (40 Stat. 755, as amended; 16 U.S.C. 703 et seq.), and the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.).

The proposed project would involve installing a gravity-based LNG terminal approximately 38 miles off the coast of Cameron Parish, Louisiana, and five takeaway pipelines that would interconnect with existing natural gas pipelines located in the Gulf of Mexico. The following federally listed threatened and/or endangered species are known to occur within, or off the coast of, Cameron Parish, Louisiana:

<u>SPECIES</u>	<u>GROUP</u>	<u>STATUS</u>
West Indian manatee	Mammal	Endangered
Bald eagle	Bird	Threatened
Piping plover	Bird	Threatened
Brown pelican	Bird	Endangered
Gulf sturgeon	Fish	Threatened
Green sea turtle	Reptile	Threatened
Hawksbill sea turtle	Reptile	Endangered
Kemp's Ridley sea turtle	Reptile	Endangered
Leatherback sea turtle	Reptile	Endangered
Loggerhead sea turtle	Reptile	Threatened

Because the forthcoming draft EIS may also serve as a Biological Assessment (BA) of potential project-related impacts to federally listed threatened and endangered species, the Service recommends that the information provided below, as well as an analysis of project-related impacts to those species, and USCG/MARAD's "likely (or not likely) to adversely affect" determination be included in the forthcoming draft EIS/BA. The National Marine Fisheries Service (NOAA Fisheries) is responsible for the following aquatic marine threatened or endangered species that occur off the Louisiana Gulf Coast: Gulf sturgeon (*Acipenser oxyrinchus desotoi*) and the above listed sea turtles (green: *Chelonia mydas*; hawksbill: *Eretmochelys imbricata*; Kemp's ridley: *Lepidchelys kempii*; leatherback: *Dermochelys coriacea*; and loggerhead: *Caretta caretta*; note however, that the Service is responsible for sea turtles while they are coming ashore and nesting). Please contact the NOAA Fisheries office (727/570-5312) in St. Petersburg, Florida, for further information concerning those species.

West Indian manatees (*Trichechus manatus*), federally listed as endangered, occasionally enter Louisiana coastal waters and streams during the summer months (i.e., June through September). The manatee has declined in numbers due to collisions with boats and barges, entrapment in flood control structures, poaching, habitat loss, and pollution. Cold weather and outbreaks of red tide may also adversely affect these animals.

Bald eagles (*Haliaeetus leucocephalus*) nest in Louisiana from October through mid-May. Eagles typically nest in bald cypress trees near fresh to intermediate marshes or open water in the southeastern Parishes. Areas with high numbers of nests include the Lake Verret Basin, south to Houma, the southern/marsh ridge complex from Houma to Bayou Vista, the north shore of Lake Pontchartrain, and the Lake Salvador area. Eagles also winter, and infrequently nest near large lakes in central and northern Louisiana. Bald eagles usually return to the same nest year after year, but they may also use alternate nests in the same general vicinity in different years. Bald eagles are most vulnerable to disturbance during courtship, nest building, egg laying, incubation, and brooding (roughly the first 12 weeks of the nesting cycle). Disturbance during this critical period may lead to nest abandonment, cracked and chilled eggs, and exposure of small young to the elements. Human activity near a nest late in the nesting cycle may also cause flightless birds to jump from the nest tree, thus reducing their chance of survival. Major threats to this species include habitat alteration, human disturbance, and environmental contaminants (i.e., organochlorine pesticides and lead).

The piping plover (*Charadrius melodus*), as well as its designated critical habitat, occur along the Gulf of Mexico shoreline. Piping plovers winter in Louisiana, and may be present for 8 to 10 months; they arrive from the breeding grounds as early as late July and remain until late March or April. Piping plovers feed extensively on intertidal beaches, mudflats, sandflats, algal flats, and wash-over passes with no or very sparse emergent vegetation; they also require unvegetated or sparsely vegetated areas for roosting. Roosting areas may have debris, detritus, or micro-topographic relief offering refuge to plovers from high winds and cold weather. In most areas, wintering piping plovers are dependant on a mosaic of sites distributed throughout the landscape, as the suitability of a particular site for foraging or roosting is dependent on local weather and tidal conditions. Plovers move among sites as environmental conditions change.

Designated piping plover critical habitat includes those specific areas that are essential to the conservation of that species. The primary constituent elements for piping plover wintering

habitat are those which support foraging, roosting, and sheltering and the physical features necessary for maintaining the natural processes that support those habitat components. Constituent elements are found in geologically dynamic coastal areas that contain intertidal beaches and flats (between annual low tide and annual high tide), and associated dune systems and flats above annual high tide. Important components (or primary constituent elements) of intertidal flats include sand and/or mud flats with no or very sparse emergent vegetation. Adjacent unvegetated or sparsely vegetated sand, mud, or algal flats above high tide are also important, especially for roosting plovers. Major threats to this species include the loss and degradation of habitat due to development, disturbance by humans and pets, and predation.

In southwestern Louisiana, brown pelicans (*Pelecanus occidentalis*) are currently known to nest on Rabbit Island in Calcasieu Lake. In winter, spring, and summer, nests are built in mangrove trees or other shrubby vegetation, although occasional ground nesting may occur. Pelicans also change nesting sites as habitat changes occur. Brown pelicans feed along the Louisiana coast in shallow estuarine waters, using sand spits and offshore sand bars as rest and roost areas. Major threats to this species include chemical pollutants, colony site erosion, disease, and human disturbance.

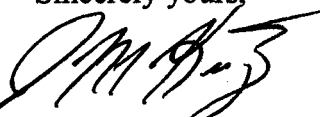
Should the proposed project involve construction of a new onshore base, expansion of an existing onshore base, or activities associated with onshore natural gas pipelines along the Louisiana Gulf coast, further consultation with this office will be necessary for the manatee, bald eagle, piping plover, and brown pelican.

Lighting, communication, and/or flare towers associated with the operation of the LNG terminal could potentially impact trans-Gulf migratory birds. Impacts from lighting and towers should also be addressed and analyzed in the EIS. For your convenience, the Service has enclosed guidelines for the siting, construction, operation, and decommissioning of communication towers.

The proposed project would likely affect aquatic resources within the New Orleans Corps of Engineers' (Corps) regulatory jurisdiction. If the Corps determines that the proposed project is within their jurisdiction, official Service comments would be provided in response to the corresponding Public Notice issued by the Corps. Accordingly, we recommend that the draft EIS fully evaluate potential project impacts on those resources.

We appreciate the opportunity to provide comments. If you have any questions regarding our comments, please contact Kevin Moody, Regional Environmental Coordinator, at 404/679-7089 or Brigitte Firmin, of our Lafayette, Louisiana office at 337/291-3108.

Sincerely yours,



Acting

Sam D. Hamilton  
Regional Director

Enclosure

Requested "cc" List:

REO, Albuquerque, NM  
REO, Atlanta, GA  
FWS, Lafayette, LA  
NOAA Fisheries, St. Petersburg, FL  
NOAA Fisheries, Baton Rouge, LA  
Corps of Engineers, New Orleans, LA  
LDNR, CMD, Baton Rouge, LA  
LDWF, Baton Rouge, LA  
LDWF, Natural Heritage Program, Baton Rouge, LA

Addresses:

FWS  
646 Cajundome Boulevard, Suite 400  
Lafayette, Louisiana 70506

NOAA Fisheries  
Southeast Regional Office  
9721 Executive Center Drive North  
St. Petersburg, Florida 33702

NOAA Fisheries  
c/o LSU Center for Wetlands  
Baton Rouge, Louisiana 70803-7535

U.S. Army Corps of Engineers  
Attn: Regulatory Functions Branch  
Post Office Box 60267  
New Orleans, Louisiana 70160

Louisiana Dept. of Natural Resources  
Coastal Management Division  
Post Office Box 44487  
Baton Rouge, Louisiana 70804-4487

Louisiana Dept. of Wildlife and Fisheries  
Post Office Box 98000  
Baton Rouge, Louisiana 70898

LDWF, Natural Heritage Program  
2000 Quail Drive  
Baton Rouge, Louisiana 70808

United States Department of Interior  
Fish and Wildlife Service  
Washington, DC 20240

September 14, 2000

**To:** Regional Directors

**From:** Director /s/ Jamie Rappaport Clark

**Subject:** Service Guidance on the Siting, Construction, Operation and Decommissioning of Communications Towers\*

Construction of communications towers (including radio, television, cellular, and microwave) in the United States has been growing at an exponential rate, increasing at an estimated 6 percent to 8 percent annually. According to the Federal Communication Commission's *2000 Antenna Structure Registry*, the number of lighted towers greater than 199 feet above ground level (AGL) currently number over 45,000 and the total number of towers over 74,000. Non-compliance with the registry program is estimated at 24 percent to 38 percent, bringing the total to 92,000 to 102,000. By 2003, all television stations must be digital, adding potentially 1,000 new towers exceeding 1,000 feet AGL.

The construction of new towers creates a potentially significant impact on migratory birds, especially some 350 species of night-migrating birds. Communications towers are estimated to kill 4-5 million birds per year, which violates the spirit and the intent of the Migratory Bird Treaty Act and the Code of Federal Regulations at Part 50 designed to implement the MBTA. Some of the species affected are also protected under the Endangered Species Act and Bald and Golden Eagle Act.

Service personnel may become involved in the review of proposed tower sitings and/or in the evaluation of tower impacts on migratory birds through National Environmental Policy Act review; specifically, Sections 1501.6, opportunity to be a cooperating agency, and 1503.4, duty to comment on federally-licensed activities for agencies with jurisdiction by law, in this case the MBTA, or because of special expertise. Also, the National Wildlife Refuge System Improvement Act requires that any activity on Refuge lands be determined as compatible with the Refuge system mission and the Refuge purpose(s). In addition, the Service is required by the ESA to assist other Federal agencies in ensuring that any action they authorize, implement, or fund will not jeopardize the continued existence of any Federally endangered or threatened species.

A Communication Tower Working Group composed of government agencies, industry, academic researchers and NGO's has been formed to develop and implement a research protocol to determine the best ways to construct and operate towers to prevent bird strikes. Until the research study is completed, or until research efforts uncover significant new mitigation measures, all Service personnel involved in the review of proposed tower sitings and/or the evaluation of the impacts of towers on migratory birds should use the attached interim guidelines when making recommendations to all companies, license applicants, or licensees proposing new tower sitings. These guidelines were developed by Service personnel from research conducted in several eastern, midwestern, and southern states, and have been refined through Regional review. They are based on the best information available at this time, and are the most prudent and effective measures for avoiding bird strikes at towers. We believe that they will provide significant protection for migratory birds pending completion of the Working Group's recommendations. As new information becomes available, the guidelines will be updated accordingly.

Implementation of these guidelines by the communications industry is voluntary, and our recommendations must be balanced with Federal Aviation Administration requirements and local community concerns where necessary. Field offices have discretion in the use of these guidelines on a case by case basis, and may also have additional recommendations to add which are specific to their geographic area.

Also attached is a Tower Site Evaluation Form, which may prove useful in evaluating proposed towers and in streamlining the evaluation process. Copies may be provided to consultants or tower companies who regularly submit requests for consultation, as well as to those who submit individual requests that do not contain sufficient information to allow adequate evaluation. This form is for discretionary use, and may be modified as necessary.

The Migratory Bird Treaty Act (16 U.S.C. 703-712) prohibits the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests, except when specifically authorized by the Department of the Interior. While the Act has no provision for allowing unauthorized take, it must be recognized that some birds may be killed at structures such as communications towers even if all reasonable measures to avoid it are implemented. The Service's Division of Law Enforcement carries out its mission to protect migratory birds not only through investigations and enforcement, but also through fostering relationships with individuals and industries that proactively seek to eliminate their impacts on migratory birds. While it is not possible under the Act to absolve individuals or companies from liability if they follow these recommended guidelines, the Division of Law Enforcement and Department of Justice have used enforcement and prosecutorial discretion in the past regarding individuals or companies who have made good faith efforts to avoid the take of migratory birds.

Please ensure that all field personnel involved in review of FCC licensed communications tower proposals receive copies of this memorandum. Questions regarding this issue should be directed to Dr. Benjamin Tuggle, Chief, Division of Habitat Conservation, at (703)358-2161, or Jon Andrew, Chief, Division of Migratory Bird Management, at (703)358-1714. These guidelines will be incorporated in a Director's Order and placed in the Fish and Wildlife Service Manual at a future date.

#### **Service Interim Guidelines For Recommendations On**

##### **Communications Tower Siting, Construction, Operation, and Decommissioning**

1. Any company/applicant/licensee proposing to construct a new communications tower should be strongly encouraged to collocate the communications equipment on an existing communication tower or other structure (e.g., billboard, water tower, or building mount). Depending on tower load factors, from 6 to 10 providers may collocate on an existing tower.
2. If collocation is not feasible and a new tower or towers are to be constructed, communications service providers should be strongly encouraged to construct towers no more than 199 feet above ground level (AGL), using construction techniques which do not require guy wires (e.g., use a lattice structure, monopole, etc.). Such towers should be unlighted if Federal Aviation Administration regulations permit.

3. If constructing multiple towers, providers should consider the cumulative impacts of all of those towers to migratory birds and threatened and endangered species as well as the impacts of each individual tower.
4. If at all possible, new towers should be sited within existing "antenna farms" (clusters of towers). Towers should not be sited in or near wetlands, other known bird concentration areas (e.g., state or Federal refuges, staging areas, rookeries), in known migratory or daily movement flyways, or in habitat of threatened or endangered species. Towers should not be sited in areas with a high incidence of fog, mist, and low ceilings.
5. If taller (>199 feet AGL) towers requiring lights for aviation safety must be constructed, the minimum amount of pilot warning and obstruction avoidance lighting required by the FAA should be used. Unless otherwise required by the FAA, only white (preferable) or red strobe lights should be used at night, and these should be the minimum number, minimum intensity, and minimum number of flashes per minute (longest duration between flashes) allowable by the FAA. The use of solid red or pulsating red warning lights at night should be avoided. Current research indicates that solid or pulsating (beacon) red lights attract night-migrating birds at a much higher rate than white strobe lights. Red strobe lights have not yet been studied.
6. Tower designs using guy wires for support which are proposed to be located in known raptor or waterbird concentration areas or daily movement routes, or in major diurnal migratory bird movement routes or stopover sites, should have daytime visual markers on the wires to prevent collisions by these diurnally moving species. (For guidance on markers, see *Avian Power Line Interaction Committee (APLIC). 1994. Mitigating Bird Collisions with Power Lines: The State of the Art in 1994. Edison Electric Institute, Washington, D.C., 78 pp.* and *Avian Power Line Interaction Committee (APLIC). 1996. Suggested Practices for Raptor Protection on Power Lines. Edison Electric Institute/Raptor Research Foundation, Washington, D.C., 128 pp.* Copies can be obtained via the Internet at <http://www.eei.org/resources/pubcat/enviro/>, or by calling 1-800/334-5453).
7. Towers and appendant facilities should be sited, designed and constructed so as to avoid or minimize habitat loss within and adjacent to the tower "footprint". However, a larger tower footprint is preferable to the use of guy wires in construction. Road access and fencing should be minimized to reduce or prevent habitat fragmentation and disturbance, and to reduce above ground obstacles to birds in flight.
8. If significant numbers of breeding, feeding, or roosting birds are known to habitually use the proposed tower construction area, relocation to an alternate site should be recommended. If this is not an option, seasonal restrictions on construction may be advisable in order to avoid disturbance during periods of high bird activity.
9. In order to reduce the number of towers needed in the future, providers should be encouraged to design new towers structurally and electrically to accommodate the applicant/licensee's antennas and comparable antennas for at least two additional users (minimum of three users for each tower structure), unless this design would require the addition of lights or guy wires to an otherwise unlighted and/or unguyed tower.
10. Security lighting for on-ground facilities and equipment should be down-shielded to keep light within the boundaries of the site.

11. If a tower is constructed or proposed for construction, Service personnel or researchers from the Communication Tower Working Group should be allowed access to the site to evaluate bird use, conduct dead-bird searches, to place net catchments below the towers but above the ground, and to place radar, Global Positioning System, infrared, thermal imagery, and acoustical monitoring equipment as necessary to assess and verify bird movements and to gain information on the impacts of various tower sizes, configurations, and lighting systems.
12. Towers no longer in use or determined to be obsolete should be removed within 12 months of cessation of use.

In order to obtain information on the extent to which these guidelines are being implemented, and to identify any recurring problems with their implementation which may necessitate modifications, letters provided in response to requests for evaluation of proposed towers should contain the following request:

**"In order to obtain information on the usefulness of these guidelines in preventing bird strikes, and to identify any recurring problems with their implementation which may necessitate modifications, please advise us of the final location and specifications of the proposed tower, and which of the measures recommended for the protection of migratory birds were implemented. If any of the recommended measures can not be implemented, please explain why they were not feasible."**

*\* Please note that the above information can be found at the following website:  
<http://migratorybirds.fws.gov/issues/towers/comtow.html>*



## **TOWER SITE EVALUATION FORM**

1. Location ( Provide maps if possible):

State: \_\_\_\_\_ County: \_\_\_\_\_ Latitude/Longitude/GPS Grid: \_\_\_\_\_ City  
and Highway Direction ( 2 miles W on Hwy 20, etc.)

2. Elevation above mean sea level: \_\_\_\_\_

3. Will the equipment be co-located on an existing **FCC licensed** tower or other existing structure (building, billboard, etc.)? (y/n) \_\_\_\_\_ If yes, type of structure:

If yes, no further information is required.

4. If no, provide proposed specifications for new tower:

Height: \_\_\_\_\_ Construction type (lattice, monopole, etc.):

\_\_\_\_\_ Guy-wired? (y/n) \_\_\_\_\_ No. bands: \_\_\_\_\_ Total No. Wires:  
Lighting (Security & Aviation):

If tower will be lighted or guy-wired, complete items 5-19. If not, complete only items 19 and 20.

5. Area of tower footprint in acres or square feet: \_\_\_\_\_

6. Length and width of access road in feet: \_\_\_\_\_

7. General description of terrain - mountainous, rolling hills, flat to undulating, etc. Photographs of the site and surrounding area are beneficial:

8. Meteorological conditions (incidence of fog, low ceilings, etc.):

9. Soil type(s):

10. Habitat types and land use on and adjacent to the site, by acreage and percentage of total:

11. Dominant vegetative species in each habitat type:

12. Average diameter breast height of dominant tree species in forested areas:

13. Will construction at this site cause fragmentation of a larger block of habitat into two or more smaller blocks? (y/n)\_\_\_\_\_ If yes, describe:

14. Is evidence of bird roosts or rookeries present? (y/n)\_\_\_\_\_ If yes, describe:

15. Distance to nearest wetland area (forested swamp, marsh, riparian, marine, etc.), and coastline if applicable:

16. Distance to nearest telecommunications tower:

17. Potential for co-location of antennas on existing towers or other structures:

18. Have measures been incorporated for minimizing impacts to migratory birds? (y/n) \_\_\_\_\_ If yes, describe:

19. Has an evaluation been made to determine if the proposed facility may affect listed or proposed endangered or threatened species or their habitats as required by FCC regulation at CFR 1.1307(a)(3)? (y/n) \_\_\_\_\_ If yes, present findings:

47

20. Additional information required:



# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

646 Cajundome Blvd.

Suite 400

Lafayette, Louisiana 70506

June 2, 2004

Commander Mark A. Prescott  
U.S. Coast Guard (G-MSO-5)  
Chief, Deepwater Ports Standards Division  
2100 Second Street, S.W.  
Washington, DC 20593-0001

USCG-2004-16860-49

Dear Commander Prescott:

Please reference your May 6, 2004, letter (received in this office on May 11, 2004) requesting our review of the proposed Gulf Landing, L.L.C., liquefied natural gas (LNG) deepwater port. The proposed project would involve installing a gravity-based LNG terminal approximately 38 miles off the coast of Cameron Parish, Louisiana, and five takeaway pipelines that would interconnect with existing natural gas pipelines located in the Gulf of Mexico. The U.S. Fish and Wildlife Service (Service) has reviewed the information you provided, and offers the following comments in accordance with provisions of the National Environmental Policy Act (NEPA) of 1969 (83 Stat. 852; 42 U.S.C. 4321 et seq.), the Endangered Species Act (ESA) of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.), the Migratory Bird Treaty Act (40 Stat. 755, as amended; 16 U.S.C. 703 et seq.), and the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.).

The following Federally listed threatened and/or endangered species are known to occur within, or off the coast of, Cameron Parish, Louisiana:

<u>SPECIES</u>	<u>GROUP</u>	<u>STATUS</u>
West Indian manatee	Mammal	Endangered
Bald eagle	Bird	Threatened
Piping plover	Bird	Threatened
Brown pelican	Bird	Endangered
Gulf sturgeon	Fish	Threatened
Green sea turtle	Reptile	Threatened
Hawksbill sea turtle	Reptile	Endangered
Kemp's Ridley sea turtle	Reptile	Endangered
Leatherback sea turtle	Reptile	Endangered
Loggerhead sea turtle	Reptile	Threatened

Because the forthcoming draft EIS may also serve as a Biological Assessment (BA) of potential project-related impacts to Federally listed threatened and endangered species, the Service recommends that the information provided below, as well as an analysis of project-related impacts to those species, and USCG/MARAD's "likely (or not likely) to adversely affect" determination be included in the forthcoming draft EIS/BA. The National Marine Fisheries

Service (NOAA Fisheries) is responsible for marine threatened or endangered species that occur off the Louisiana Gulf Coast, including the Gulf sturgeon and the above listed sea turtles (however, the Service is responsible for sea turtles while they are coming ashore and nesting). Please contact the NOAA Fisheries office (727/570-5312) in St. Petersburg, Florida, for further information concerning those species.

Federally listed as endangered, West Indian manatees (*Trichechus manatus*) occasionally enter Louisiana coastal waters and streams during the summer months (i.e., June through September). The manatee has declined in numbers due to collisions with boats and barges, entrapment in flood control structures, poaching, habitat loss, and pollution. Cold weather and outbreaks of red tide may also adversely affect these animals.

Bald eagles (*Haliaeetus leucocephalus*) nest in Louisiana from October through mid-May. Eagles typically nest in bald cypress trees near fresh to intermediate marshes or open water in the southeastern Parishes. Areas with high numbers of nests include the Lake Verret Basin, south to Houma, the southern/marsh ridge complex from Houma to Bayou Vista, the north shore of Lake Pontchartrain, and the Lake Salvador area. Eagles also winter, and infrequently nest near large lakes in central and northern Louisiana. Bald eagles usually return to the same nest year after year, but they may also use alternate nests in the same general vicinity in different years. Bald eagles are most vulnerable to disturbance during courtship, nest building, egg laying, incubation, and brooding (roughly the first 12 weeks of the nesting cycle). Disturbance during this critical period may lead to nest abandonment, cracked and chilled eggs, and exposure of small young to the elements. Human activity near a nest late in the nesting cycle may also cause flightless birds to jump from the nest tree, thus reducing their chance of survival. Major threats to this species include habitat alteration, human disturbance, and environmental contaminants (i.e., organochlorine pesticides and lead).

The piping plover (*Charadrius melodus*), as well as its designated critical habitat, occur along the Gulf of Mexico shoreline. Piping plovers winter in Louisiana, and may be present for 8 to 10 months; they arrive from the breeding grounds as early as late July and remain until late March or April. Piping plovers feed extensively on intertidal beaches, mudflats, sandflats, algal flats, and wash-over passes with no or very sparse emergent vegetation; they also require unvegetated or sparsely vegetated areas for roosting. Roosting areas may have debris, detritus, or micro-topographic relief offering refuge to plovers from high winds and cold weather. In most areas, wintering piping plovers are dependant on a mosaic of sites distributed throughout the landscape, as the suitability of a particular site for foraging or roosting is dependent on local weather and tidal conditions. Plovers move among sites as environmental conditions change.

Designated piping plover critical habitat includes those specific areas that are essential to the conservation of that species. The primary constituent elements for piping plover wintering habitat are those which support foraging, roosting, and sheltering and the physical features necessary for maintaining the natural processes that support those habitat components. Constituent elements are found in geologically dynamic coastal areas that contain intertidal beaches and flats (between annual low tide and annual high tide), and associated dune systems and flats above annual high tide. Important components (or primary constituent elements) of intertidal flats include sand and/or mud flats with no or very sparse emergent vegetation. Adjacent unvegetated or sparsely vegetated sand, mud, or algal flats above high tide are also

important, especially for roosting plovers. Major threats to this species include the loss and degradation of habitat due to development, disturbance by humans and pets, and predation.

In southwestern Louisiana, brown pelicans (*Pelecanus occidentalis*) are currently known to nest on Rabbit Island in Calcasieu Lake. In winter, spring, and summer, nests are built in mangrove trees or other shrubby vegetation, although occasional ground nesting may occur. Pelicans also change nesting sites as habitat changes occur. Brown pelicans feed along the Louisiana coast in shallow estuarine waters, using sand spits and offshore sand bars as rest and roost areas. Major threats to this species include chemical pollutants, colony site erosion, disease, and human disturbance.

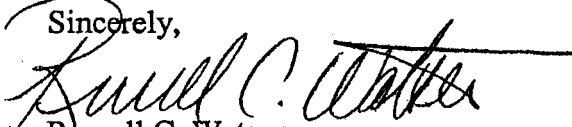
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The proposed project would likely affect aquatic resources within the New Orleans Corps of Engineers' (Corps) regulatory jurisdiction. If the Corps determines that the proposed project is within their jurisdiction, official Service comments would be provided in response to the corresponding Public Notice issued by the Corps. Accordingly, we recommend that the draft EIS fully evaluate potential project impacts on those resources.

We appreciate the opportunity to provide information during the planning stages of the proposed activity. If you have any questions regarding our comments, please contact Brigitte Firmin (337/291-3108) of this office.

Sincerely,

  
Russell C. Watson  
Supervisor  
Louisiana Field Office

Enclosure

cc: NOAA Fisheries, St. Petersburg, FL  
NOAA Fisheries, Baton Rouge, LA  
Corps of Engineers, New Orleans, LA  
LDNR, CMD, Baton Rouge, LA  
LDWF, Baton Rouge, LA  
LDWF, Natural Heritage Program, Baton Rouge, LA

United States Department of Interior  
Fish and Wildlife Service  
Washington, DC 20240

September 14, 2000

**To:** Regional Directors

**From:** Director /s/ Jamie Rappaport Clark

**Subject:** Service Guidance on the Siting, Construction, Operation and Decommissioning of Communications Towers\*

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### **Service Interim Guidelines For Recommendations On**

#### **Communications Tower Siting, Construction, Operation, and Decommissioning**

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11. If a tower is constructed or proposed for construction, Service personnel or researchers from the Communication Tower Working Group should be allowed access to the site to evaluate bird use, conduct dead-bird searches, to place net catchments below the towers but above the ground, and to place radar, Global Positioning System, infrared, thermal imagery, and acoustical monitoring equipment as necessary to assess and verify bird movements and to gain information on the impacts of various tower sizes, configurations, and lighting systems.
12. Towers no longer in use or determined to be obsolete should be removed within 12 months of cessation of use.

In order to obtain information on the extent to which these guidelines are being implemented, and to identify any recurring problems with their implementation which may necessitate modifications, letters provided in response to requests for evaluation of proposed towers should contain the following request:

“In order to obtain information on the usefulness of these guidelines in preventing bird strikes, and to identify any recurring problems with their implementation which may necessitate modifications, please advise us of the final location and specifications of the proposed tower, and which of the measures recommended for the protection of migratory birds were implemented. If any of the recommended measures can not be implemented, please explain why they were not feasible.”

*\* Please note that the above information can be found at the following website:  
<http://migratorybirds.fws.gov/issues/towers/comtow.html>*

## TOWER SITE EVALUATION FORM

1. Location ( Provide maps if possible):

State: \_\_\_\_\_ County: \_\_\_\_\_ Latitude/Longitude/GPS Grid: \_\_\_\_\_ City  
and Highway Direction ( 2 miles W on Hwy 20, etc.)

2. Elevation above mean sea level: \_\_\_\_\_

3. Will the equipment be co-located on an existing **FCC licensed** tower or other existing structure (building, billboard, etc.)? (y/n) \_\_\_\_\_ If yes, type of structure:

If yes, no further information is required.

4. If no, provide proposed specifications for new tower:

Height: \_\_\_\_\_ Construction type (lattice, monopole, etc.):

\_\_\_\_\_ Guy-wired? (y/n) \_\_\_\_\_ No. bands: \_\_\_\_\_ Total No. Wires:

\_\_\_\_\_ Lighting (Security & Aviation):

If tower will be lighted or guy-wired, complete items 5-19. If not, complete only items 19 and 20.

5. Area of tower footprint in acres or square feet: \_\_\_\_\_

6. Length and width of access road in feet: \_\_\_\_\_

7. General description of terrain - mountainous, rolling hills, flat to undulating, etc. Photographs of the site and surrounding area are beneficial:

8. Meteorological conditions (incidence of fog, low ceilings, etc.):

9. Soil type(s):

10. Habitat types and land use on and adjacent to the site, by acreage and percentage of total:

11. Dominant vegetative species in each habitat type:

12. Average diameter breast height of dominant tree species in forested areas:

13. Will construction at this site cause fragmentation of a larger block of habitat into two or more smaller blocks? (y/n)\_\_\_\_\_ If yes, describe:

14. Is evidence of bird roosts or rookeries present? (y/n)\_\_\_\_\_ If yes, describe:

15. Distance to nearest wetland area (forested swamp, marsh, riparian, marine, etc.), and coastline if applicable:

16. Distance to nearest telecommunications tower:

17. Potential for co-location of antennas on existing towers or other structures:

18. Have measures been incorporated for minimizing impacts to migratory birds? (y/n) \_\_\_\_\_ If yes, describe:

19. Has an evaluation been made to determine if the proposed facility may affect listed or proposed endangered or threatened species or their habitats as required by FCC regulation at CFR 1.1307(a)(3)? (y/n) \_\_\_\_\_ If yes, present findings:

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20. Additional information required:

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